



The Accessibility of Anti-Cancer Drugs in China's Urban Customized Commercial Medical Insurance

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Background and Objective

- Urban Customized Commercial Medical Insurance(UCCMI), a form of social-commercial integration insurance, represents an important component of the multi-level medical security system in China.
- Given this context, this study aimed to analyze the coverage status and the accessibility of anti-cancer drugs within UCCMIs.

Methods

- Data were sourced from the PharmaCube database and included 2020-2024 UCCMI insurance coverage and high-priced drugs.
- Descriptive statistical analysis was used to identify key characteristics of anti-cancer drugs.
- Affordability analysis was conducted on drugs were included in ten or more 2024 UCCMIs.
- Affordability ratios were defined as the out-of-pocket cost per patient divided by the 2024 urban household non-food consumption expenditure.
- Availability ratios were defined as the regional coverage of drugs.

Results

- 219 anti-cancer drugs were analyzed, corresponding to 115 UCCMI products and 208 specialty drug coverages. 42.9% (94) were listed in the National Reimbursement Drug List (NRDL).
- Across 108 cancer types covered, drugs for non-small cell lung cancer(n=42) were most frequently included.

Results(continued)

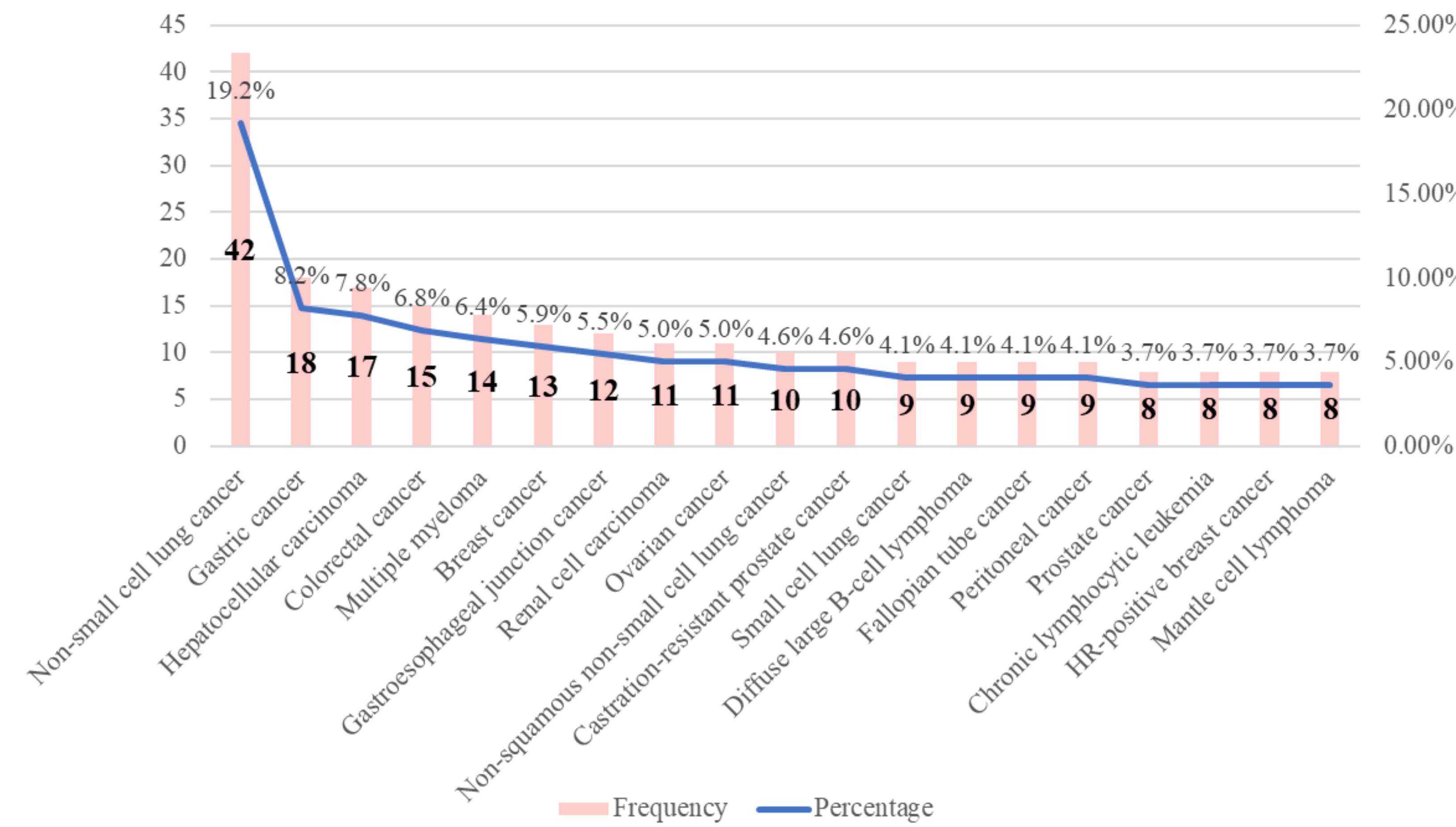


Figure 1 Occurrence of certain cancers (frequency ≥ 8)

- Regarding specialty drug coverage, deductibles (¥0–¥50,000, median ¥0) and pay-out caps (¥50,000–¥3.6 million, median ¥1 million) generally fixed amounts, while reimbursement rates were typically differentiated by pre-existing (median 80% for non-pre-existing, 30% for pre-existing).

Table 1 Summary of specialty drug coverage

Key Feature	Typical Pattern	Count	Min	Max	Median
Deductible (Unit: ¥ 10,000)	Direct Setting	186	0	5	0
	With/without pre-existing	11	Non-pre-existing: 0 Pre-existing: 2	Non-pre-existing: 2 Pre-existing: 2.5	Non-pre-existing: 0 Pre-existing: 2
	New enrollment / renewal	10	New enrollment: 1.36 Renewal: 1	New enrollment: 1.7 Renewal: 1.6	New enrollment: 1.5 Renewal: 1.3
	Economic level	1	Normal: 1 ; Special hardship population: 0.5		
Reimbursement rates	Direct Setting	46	30%	100%	60%
	With/without pre-existing	141	Non-pre-existing: 40% Pre-existing: 10%	Non-pre-existing: 100% Pre-existing: 60%	Non-pre-existing: 80% Pre-existing: 30%
	New enrollment / renewal	4	New enrollment: 50% ; Renewal: 55%		
	Tiered reimbursement	0			
	Combination: With/without pre-existing+Age gradient,whether in provincial drug list,Economic level,and inside/outside NRDL; New enrollment / renewal+ tiered reimbursement	17	Non-pre-existing group: ~60%; Pre-existing group: ~30% New enrollment group: ~70%; Renewal group:~72.5%		
Pay-out caps (Unit:¥10,000)	Direct Setting	200	5	360	100
	With/without pre-existing	5	Non-pre-existing: 60 Pre-existing: 0.45	Non-pre-existing: 100 Pre-existing: 30	Non-pre-existing: 100 Pre-existing: 0.45
	New enrollment / renewal	1	New enrollment: 50 ; Renewal: 75		
	Age gradient	2	<60 years old: 120 60–100 years old: 100	<60 years old: 150 60–100 years old: 100	<60 years old: 135 60–100 years old: 100

Results(continued)

- Affordability analysis showed that among 33 NRDL-listed drugs, the number of affordable drugs rose from 10 to 13 (pre-existing) and to 32 (non-pre-existing) after being reimbursed stepwise by both basic medical insurance and UCCMI. Among the remaining 43 non-NRDL drugs, only 4 and 11 were affordable under UCCMI alone.

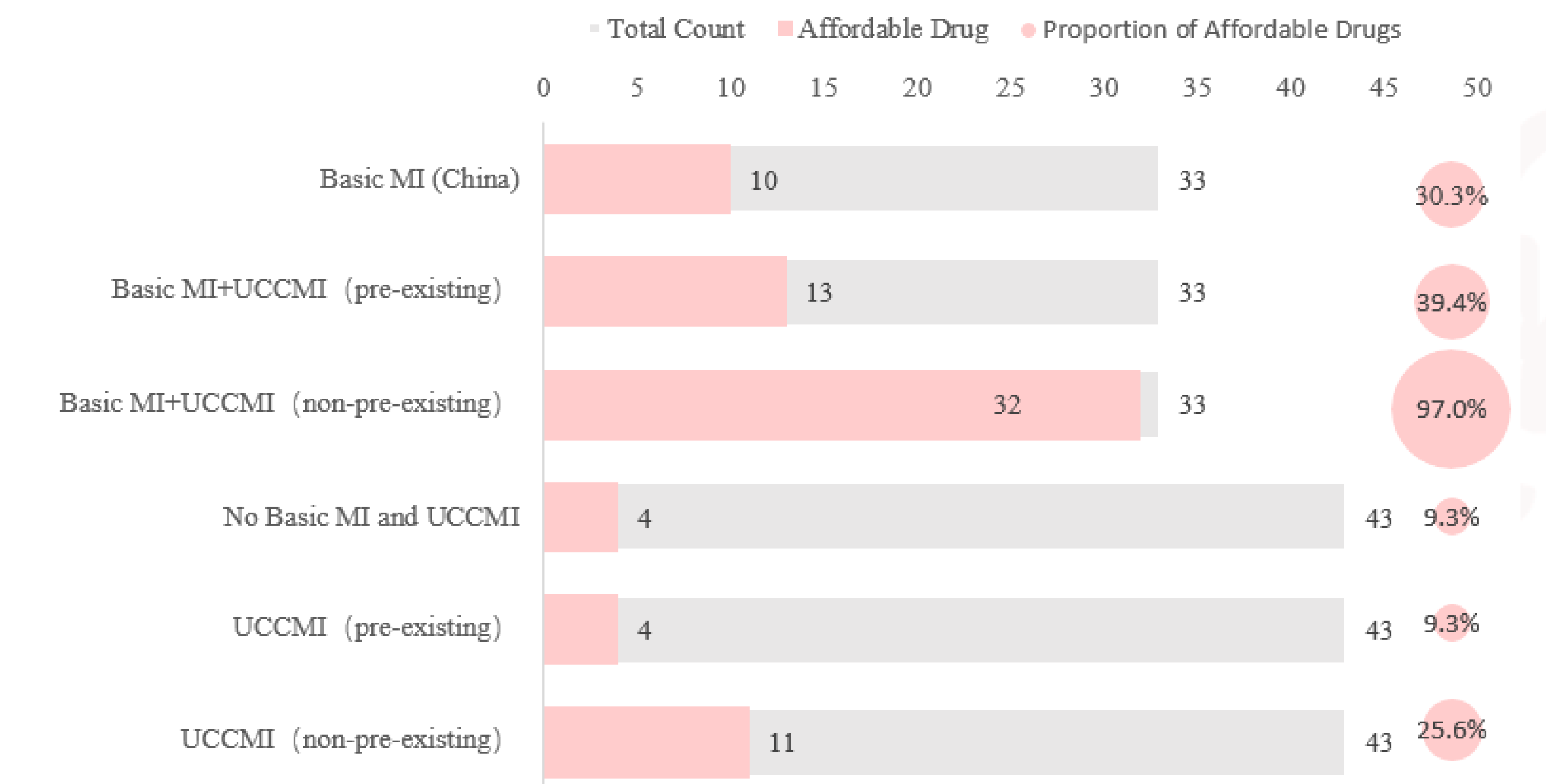


Figure 2 Affordability of anti-cancer drugs by reimbursement category

- Eastern regions had the highest concentration (54 products), covering 75.3% of anti-cancer drugs, whereas northeastern regions had relatively few (2 products), covering only 29.2%.

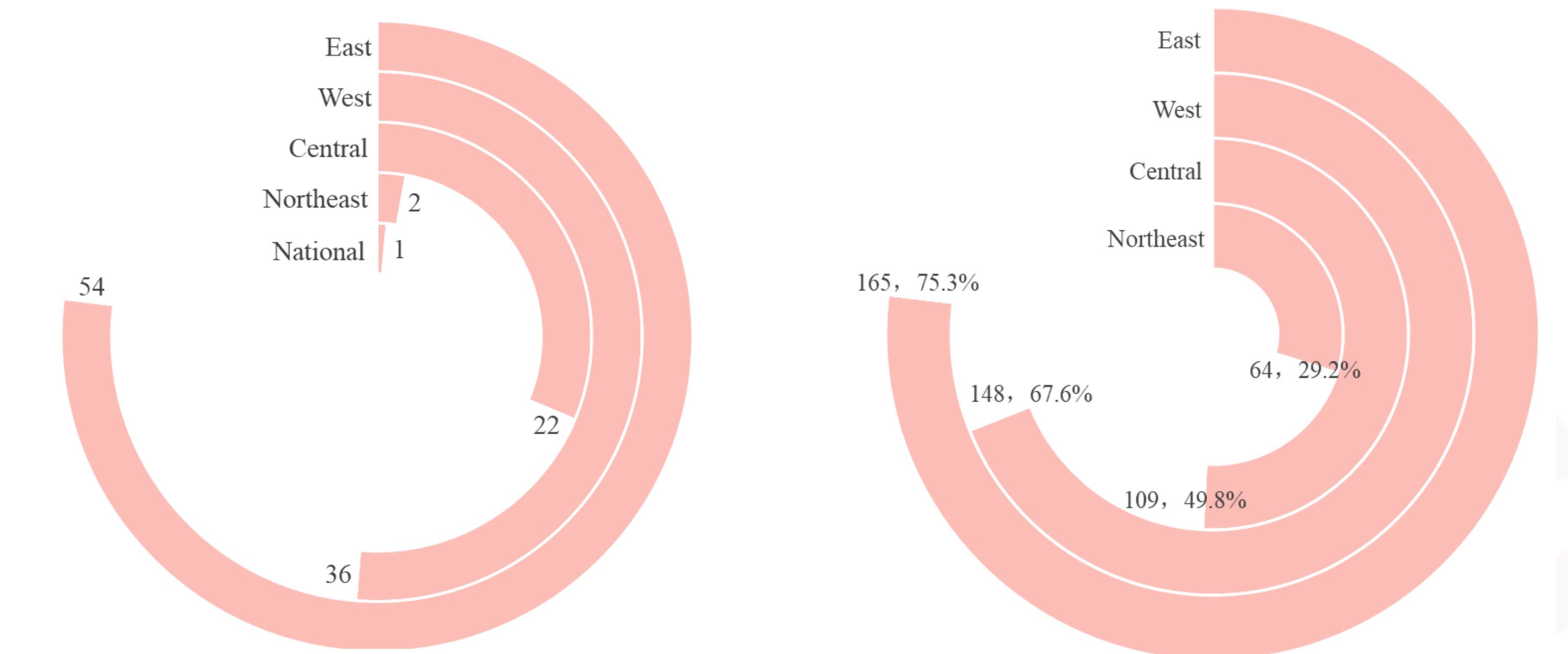


Figure 3 Regional distribution of UCCMI products and covered anti-cancer drug counts in China

Conclusion

UCCMI has substantially enhanced the accessibility of anti-cancer drugs in China; however, the affordability of certain expensive drugs and regional disparities in availability remain to be improved.